

Meeting 7/20/05 SRC Subcommittee on Laser Safety

Present: Joel Ager (MSD), Ted de Castro (EHS), Gary Zeman (EHS), Marc Hertlein (CSD), Richard Kadel (PHNSD), Larry McLouth (EHS), Robert Schoenlein (MSD), Neil Landau (DOE/BSO).

Agenda:

- (1) Update on DOE Special Operations Report on laser safety expectations and LBNL verification (Neil, Gary)
- (2) Standardization of AHD training documentation – particularly for hands-on training (Gary)
- (3) Progress report on laser lab visits, LBNL and campus (Ted)
- (4) Proposal for future implementation of LSO visits to laser groups
- (5) Status of AHD electronic database (Larry)

Minutes:

- (1) DOE Special Operation Report – visiting expert from Oak Ridge Site Office (Russ Kelley)

The following Laser Safety Expectation items have been verified:

- #15 LSO written authority to ensure safe practices
- #17 Periodic LSO visits and observation of new users
- #19 LSO participation in laser accident investigations

Following item is incomplete – expected completion date 10/31/05

- #18 comprehensive laser inventory

Following items were not possible to verify – incomplete documentation

- #9 depth of training tied to degree of hazard
- #10 documented quality and depth of training
- #11 hands-on training for performance of alignment procedures

General consensus was that if #11 is completed as stated, then #9 and #10 should be satisfied as well. This expectation should be met by July 20, 2005.

- (2) A general question was raised regarding other lab activities that require on-the-job-training, and how this is documented. AHD's should provide an effective means for documenting this training – particularly once the central AHD database is implemented.

Gary Zeman presented proposed changes to Pub. 3000 (and AHD format) to deal with training requirements and documentation including:

Pub 3000 (paragraphs 16.8.1, 16.8.2, and 16.10.2) to be modified to explicitly require laser specific OJT.

Pub 3000 to be modified to explicitly address: compatibility [16.7.4 under Exterior Containment], key control [16.7.4 under Authorization], and configuration control [16.7.4 under Beam Stops]. Stray beams and maintenance are already addressed in Chap. 16.

Pub 3000 to be modified to require signatures by both user and trainer (Chapter 16 Appendix A section under Laser Users).

Pub 3000 Chapter 16 Appendix A section on Laser Users to be modified to state that the signature by the Laser User acknowledges receipt of on-the-job training, including hands-on training in the laser lab, covering the specifics of the AHD.

Section 16.8.5 (alignment Training) to be added to Pub. 3000 making it a requirement for EH&S Course 287 (LSO Laser Lab Visit/Observation) to be repeated annually for renewal of each laser-AHD; within 6 months for every new laser user who performs alignments; and tri-annually as a retraining requirement for laser users who perform alignments.

Pub 3000 section 16.10.3 to be modified to give the LSO explicit authority and responsibility to control laser hazards and to suspend, restrict or terminate laser work if hazard controls or practices are inadequate.

There was general agreement with and support for the proposed changes, with some suggested modifications and editing. This will be done by Gary and implemented in Pub 3000 without further review by the committee.

(3) LSO visits to the laser labs are complete. Individual laser users who have not completed this training requirement will be notified that they are no longer authorized to operate lasers without direct supervision. LSO visits to U.C. Berkeley campus laser labs (with DOE funded laser users or laser equipment) remains a major un-resolved issue.

(4) Future implementation of LSO visits to laser labs – see agenda item (2) above. This is addressed on the new section 16.8.5 to be added to Pub 3000.

(5) AHD Laser Database – Larry McLouth briefly outlined the status and objectives of this database. A demonstration of the database will be scheduled for the next SRC Laser Subcommittee meeting.